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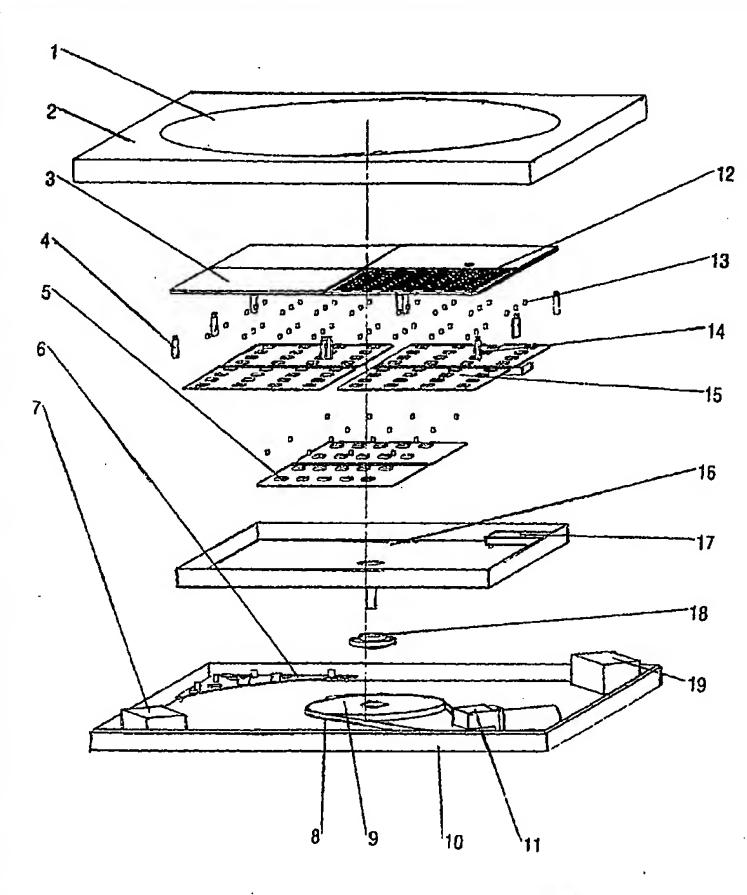
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(54) Title: FLAT MOBILE ANTENNA SYSTEM



(57) Abstract: Mobile antenna system comprising rotary part by azimuth, which is an electronically steered in elevation phase array antenna, comprising: plurality of (multi)layered structures, placed at certain levels, said structures include microstrip antenna elements (12), feeding lines (20), which properly combined and guide the electromagnetic energy, forming the necessary phase and amplitude distribution over the antenna elements, a plurality of electronic modules (28) providing amplification, phase change, frequency conversion and steering of the received signal, power supply and control circuits for the same electronic modules; a plurality of vertical transitions (13), providing the passing of the electromagnetic energy between the layered structures from different levels; frequency converting device and rotary joint (18), passing the received signal, the power supply and control circuits to the static part; sensors detecting the spatial movement of the system, and power supply and control units; static part, comprising bottom (10), cover (2) with radiotransparent part (1), mechanical supports, motor (11), gear, plurality of electronic modules (19, 6, 7).

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